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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,444	07/30/2001	Minoru Yonezawa	P 282736 T4A0-00S1411-1	8906
909	7590	04/05/2004	EXAMINER	
PILLSBURY WINTHROP, LLP P.O. BOX 10500 MCLEAN, VA 22102			ORTIZ CRIADO, JORGE L	
			ART UNIT	PAPER NUMBER
			2655	

DATE MAILED: 04/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/916,444

Applicant(s)

YONEZAWA ET AL.

Examiner

Jorge L Ortiz-Criado

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 2-6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 7-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1 and 5.
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. This application contains claims directed to the following patentably distinct species of the claimed invention:

a. Fig. 3

b. Fig. 8

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, this application contains claims to a plurality of species with no generic claims.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Art Unit: 2655

During a telephone conversation with Dale S. Lazar on 03/22/2004 a provisional election was made without traverse to prosecute the invention of species a, Fig.3, claims 1 and 7-9.

Affirmation of this election must be made by applicant in replying to this Office action. Claims 2-6 have been withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 7-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Ueda et al. U.S. 6,314,064.

Regarding claim 7, Ueda et al. discloses an optical disk processing method comprising:

the first step of executing a focus lead-in process by irradiating a rotating predetermined optical disk with a light beam applied via a first objective lens of a first optical system, said first objective lens having a first numerical aperture lower than a second numerical aperture of a second objective lens of a second optical system (See col. 8, lines 52-65; Figs. 1, 8);

the second step of discriminating an optical system suitable for a recording/reproduction process of the optical disk (See col. 9, lines 43-50);

the third step of processing the optical disk, when the optical system suitable for the recording/reproduction process of the optical disk is the first optical system, by irradiating the optical disk with the light beam via the first objective lens of the first optical system (See col. 9, lines 43-50); and

the fourth step of processing the optical disk, when the optical system suitable for the recording/reproduction process of the optical disk is the second optical system, by irradiating the optical disk with the light beam via the second objective lens of the second optical system (See col. 9, lines 43-50).

Regarding claim 8, wherein the fourth step comprises:

the fifth step of irradiating the optical disk with the light beam via the first objective lens of the first optical system (See col. 9, lines 51-60), and

detecting surface run-out (axial separation) of the optical disk from the reflected light of the light beam (See col. 9, lines 51-60);

Art Unit: 2655

the sixth step of executing the focus lead-in process by irradiating the optical disk with the light beam via the second objective lens of the second optical system on the basis of a surface run-out learning result of the optical disk detected in the fifth step (See col. 9, line 61 to col. 10 line 9);

and the seventh step of executing the recording/reproduction process on the optical disk by irradiating the optical disk with the light beam via the second objective lens of the second optical system.(See col. 10 lines 9-16)

Regarding claim 9, Ueda et al. discloses wherein the first step includes the step of:

executing the focus lead-in process by irradiating the optical disk with the light beam via the first objective lens of the first optical system while the second objective lens of the second optical system is retracted not less than a predetermined distance away from the optical disk (See col. 8, lines 52-65; col. 10, lines 17-26)

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2655

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al. U.S. 6,314,064 in vie of Okada et al. U.S. Patent No. 6,400,663.

Ueda et al. discloses n optical disk apparatus (See Figs. 1-11) comprising:

a drive motor for rotating an optical disk (See col. 7, lines 31-36);

a first objective lens (See Fig 1, ref # 34). ;

a first objective lens holder which holds said first objective lens and is supported to be drivable in an optical axis direction of said first objective lens and in one direction perpendicular to the optical axis (See col. 5, lines 50-57; Figs. 1, ref# 36);

a first focusing actuator for driving said first objective lens holder in the optical axis direction (See col. 5, lines 50-65; col. 6, lines 34-60; Figs. 1,2,3,4,9,10);

first focus detection means for detecting a relative deviation between said first objective lens and an information recording surface of the optical disk in the optical axis direction, and adjusting a focus to the information recording surface (See col. 7, lines 57-67; Figs. 1,5, ref# 31)

first drive control means for controlling driving of said first focusing actuator on the basis of a detection result of said first focus detection means (See col. 6, lines 34-60; col. 7, lines 57-67; Figs. 1,2,3,4,8);

a second objective lens having a focal length shorter than said first objective lens (See Fig. 1, ref # 22);

a second objective lens holder which holds said second objective lens and is supported to be drivable in an optical axis direction of said second objective lens and in one direction perpendicular to the optical axis (See col. 4, line 66 to col. 8, line 16; Fig. 1, ref# 36);

a second focusing actuator for driving said second objective lens holder in the optical axis direction (See col. 8, line 10-16)

second focus detection means for detecting a relative deviation between said second objective lens and the information recording surface of the optical disk in the optical axis direction, and adjusting a focus to the information recording surface (See Fig. 1, ref #28; Fig. 8, ref # S3);

second drive control means for controlling driving of said second focusing actuator on the basis of a detection result of said second focus detection means (See col. 9, lines 61-16; Fig. 1, ref #28; Fig. 8, ref # 65, 66); and

focus lead-in (pull-in) means for controlling said second drive control means to drive said second focusing actuator on the basis of the drive control signal output from said first drive control means, and executing a focus lead-in operation (See col. 9, line 51 to col. 10 line 11; Fig. 8)

Ueda et al. teaches a focus lead-in on the basis of n the basis of the drive control signal output from said first drive control means.

But Ueda et al. fails to disclose a rotation angle detection means for detecting a rotation angle of said drive motor; a storage means for storing a drive control signal output from said first drive control means and a rotation angle detection signal detected by said rotation angle detection means in synchronism with each other in order to controlling said focus lead-in means on the basis of information stored in said storage means.

Art Unit: 2655

However this feature is well known in the art as evidenced by Okada et al., which discloses a rotation angle detection means for detecting a rotation angle of said drive motor (See col. 16, line 15-27; Fig. 18, ref # 125a, 141);

storage means for storing a drive control signal output from said first drive control means and a rotation angle detection signal detected by said rotation angle detection means in synchronism with each other (See col. 16, line 15-27; Fig. 18, ref # 142)

and a focus lead-in means for controlling said drive control means to drive a focusing actuator on the basis of information stored in said storage means wherein the, and executing a focus lead-in operation (See col. 16, line 66 to col. 17 line 30; Fig. 18, ref# 125p)

Therefore it would have been obvious to one with ordinary skill in the art at the time of the invention to include a storage means for storing a drive control signal output from said first drive control means and a rotation angle detection signal detected by said rotation angle detection means in synchronism with each other in order to detect the level in which the disc is at the lowest possible position at to the lower axial deviation (run-out) limit, which is the position with substantially the minimum velocity of the information medium axial deviation where the lead-in controls are carried out stable, faster and further preventing collisions between the disk and the objectives lenses, making a reliable optical disk apparatus, as suggested by Okada et al.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

c. U.S. Patent No. 6,097,690 to Mochizuki et al., which discloses an optical disk apparatus including a pickup with a plurality of objective lenses.

Art Unit: 2655

d. U.S. Patent No. 6,418,108 to Ueda et al., which discloses a focus lead-in (pull-in) means for controlling a second drive control means to drive said second focusing actuator on the basis of the drive control signal output from a first drive control means, and executing a focus lead-in operation.

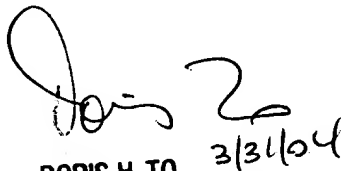
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jorge L Ortiz-Criado whose telephone number is (703) 305-8323. The examiner can normally be reached on Mon.-Thu.(8:30 am - 6:00 pm), Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris H To can be reached on (703) 305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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